Installation manual

Washer extractors
W4400H, W4600H, W4850H, W41100H

Type W4.H.

Clarus Control

Thinking of you

Electrolux

Installation manual in original language

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The manufacturer reserves the right to make changes to design and component specifications.

Safety Precautions

The machine is only intended for water-wash use.

Do not allow minors to use the machine.

Do not hose down the machine with water.

The machine's door lock must under no circumstances be bypassed.

If the machine develops a fault, this must be reported to the person in charge as soon as possible. This is important both for your safety and that of others.

The machine is not intended to be used by people (including minors) with reduced physical or mental capacity or lack of experience and knowledge. Such people must be instructed in the use of the machine by a person who has responsibility for their safety. Minors must be supervised to ensure that they do not play with the machine.

All external equipment which is connected to the machine must be CE/EMC-approved and connected using an approved shielded cable.

In order to prevent damage to the electronics (and other parts) that may occur as the result of condensation, the machine should be placed in room temperature for 24 hours before being used for the first time.

Technical data

	W4400H	W4600H	W4850H	W41100H
Innerdrum				
volume litres	400	600	850	1100
diameter mm	920	980	1220	1220
Drum speed				
wash rpm	37	36	42	42
extraction rpm	825	800	720	663
Heating				
electricity kW	36	36 or 54	–	–
steam	x	x	x	x
hot water	x	x	x	x
G-factor	350	350	350	300
Weight, net kg	1095-1450*	1380-1480	2200-2300*	2300-2400*
Sound pressure level dB (A)	75	76	73	73

* Precise weight depends on accessories fitted.

Connections

	W4400H	W4600H	W4850H	W41100H
Water valves DN	32	32	40	40
connection BSP	1 1/4"	1 1/4"	1 1/2"	1 1/2"
Rec. water pressure kPa	200-600	200-600	200-600	200-600
Functioning limits for water valve kPa	50-1000	50-1000	50-1000	50-1000
Capacity at 300 kPa l/min	150	150	200	200
Drain valve outer Ø mm	110	110	110	110
Draining capacity l/min	400	400	400	400
Steam valve DN	20	20	32	32
connection BSP	3/4"	3/4"	1 1/4"	1 1/4"
Rec. steam pressure kPa	300-600	300-600	300-600	300-600
Functioning limits for steam valve kPa	50-800	50-800	50-800	50-800
Compressed air DN	6	6	6	6
connection BSP	1/8"	1/8"	1/8"	1/8"
Rec. air pressure kPa	500-700	500-700	500-700	500-700
Consumption l/h	20	20	20	20

Technical data

Dimensions

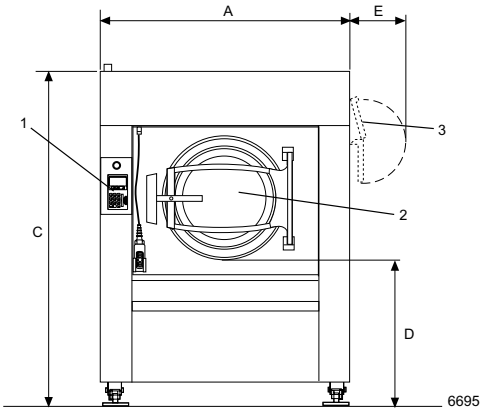
W4400H

A	B	C	D	E	F	G	H	I	K	L	M	N	O	P	R	S	T	U	V
1325	1450	2015	910	300	1865	270	660	525	425	895	1425	420	435	2205	1140	2235	950	345	370

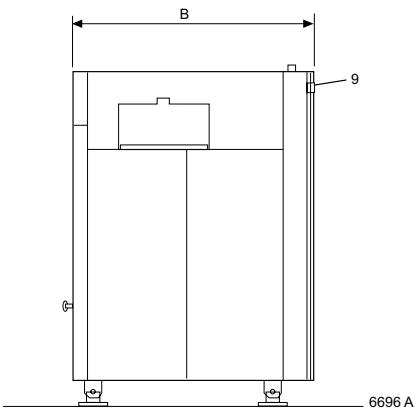
W4600H

A	B	C	D	E	F	G	H	I	K	L	M	N	O	P	R	S	T	U	V
1390	1585	2015	910	300	1865	270	660	525	425	960	1425	420	435	2200	1120	2225	935	300	325

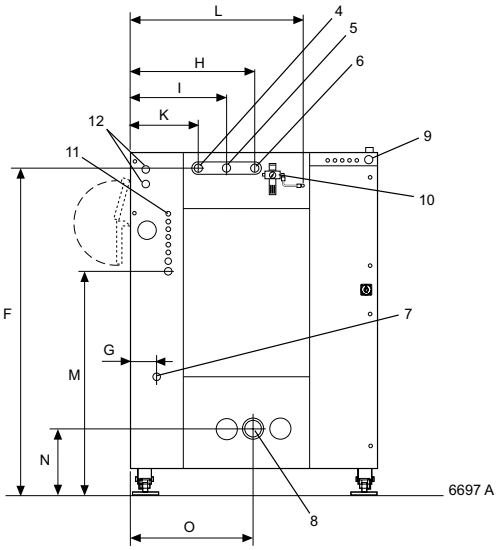
1	Control panel	**7**	Steam connection
2	Door opening ø 535	**8**	Drain
3	Soap supply injector, powder (optional)	**9**	Electrical connection
4	Cold water connection	**10**	Compressed air
5	Hot water connection	**11**	External liquid supply, 6 pcs ø 10, 1 pc ø 16 and 1 pc ø 20
6	Third water connection (optional)	**12**	Water connection, soap supply injector (optional)



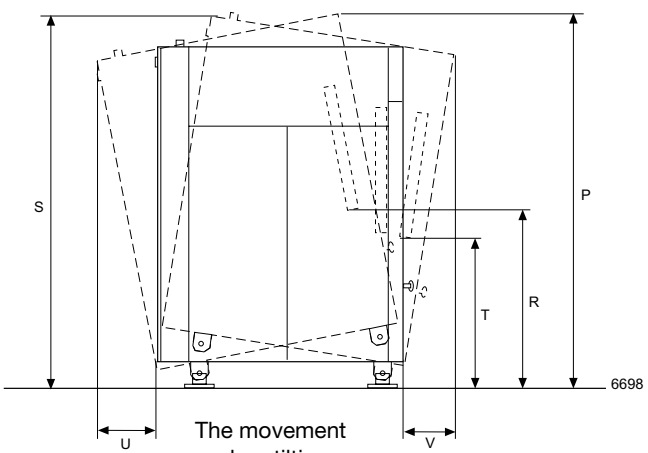
Front



Right side



Rear side



The movement when tilting

Dimensions

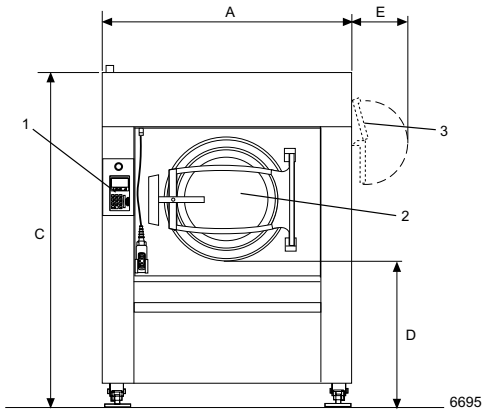
W4850H

A	B	C	D	E	F	G	H	I	K	L	M	N	O	P	R	S	T	U	V
1640	1635	2230	995	380	2135	1070	830	635	445	1140	1660	435	820	2410	1175	2480	960	285	400

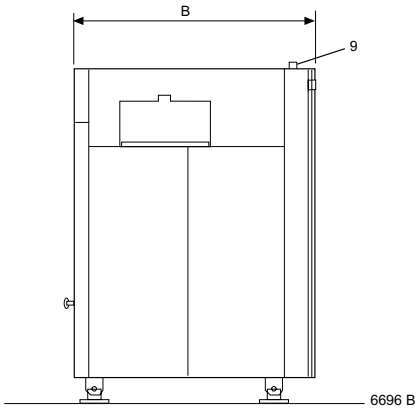
W41100H

A	B	C	D	E	F	G	H	I	K	L	M	N	O	P	R	S	T	U	V
1640	1850	2230	995	380	2135	1070	830	635	445	1140	1660	435	820	2400	1160	2480	955	240	335

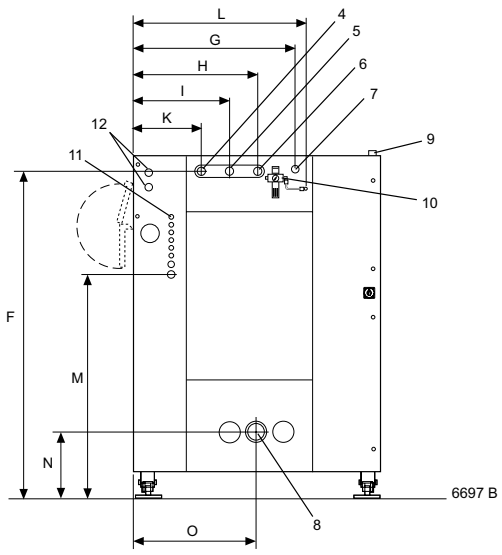
1 Control panel
2 Door opening ø 700 mm / 27 9/16"
3 Soap supply injector, powder (optional)
4 Cold water connection
5 Hot water connection
6 Third water connection (optional)
7 Steam connection
8 Drain
9 Electrical connection
10 Compressed air
11 External liquid supply, 6 pcs ø 10 mm / 3/8", 1 pc ø 16 mm / 5/8" and 1 pc ø 20 mm / 13/16"
12 Water connection, soap supply injector (optional)



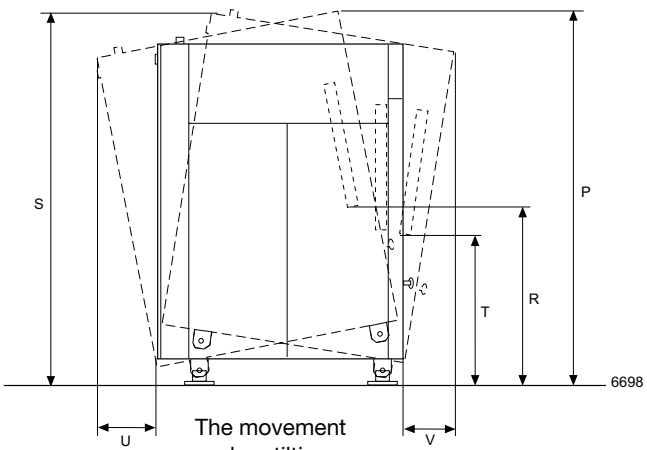
Front



Right side



Rear side



The movement when tilting

Technical data

	W4400H	W4600H	W4850H	W41100H
Frequency of the dynamic force Hz	13.8	12.7	12.0	11.1
Max floor load at extraction kN	15.8 ± 1.2	15.9 ± 6.4	22 ± 7.3	24 ± 7.3

Sound levels

Airborne sound level dB (A) re $2x10^{-5}$ Pa	75	76	73	73
With insulation	< 70	< 70	< 70	< 70

Motor

Power consumption kW	5.5	6	6.7	6.8

Installation

For the installation of machines with optional equipment (such as the tilt function), see also the section ”Optional equipment” at the end of this manual.

The washer extractor is supplied bolted in place on a pallet and packaged in a delivery crate. In some cases the machine may be supplied in waterproof/dustproof packaging. The direction from which the machine must be lifted and the machine centre of gravity are shown on the packaging.

Location and surface

The machine must not be sited over an open floor drain. Check that the floor has an even surface and is level. The floor must be capable of withstanding the following: See "Technical data".

The following clearances are recommended:

(1)
- at least 1000 mm between the machine and any wall behind it.
- at least 500 mm at each side, between the side of the machine and a wall, or between machines where these are side by side.

Mechanical installation

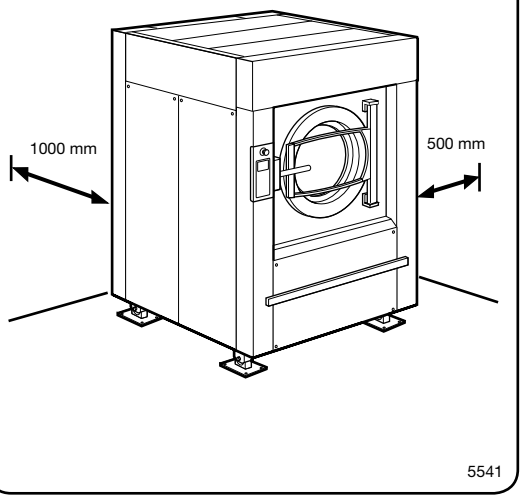
(2)
- Remove the packaging material. Remove the machine’s rear cover, side panels and lower front panel.

(3)
- Remove the eight bolts securing the machine’s outer- and innerframe onto the pallet.

Machine equipped with weight measurement

The load cells, which are fitted by the machine’s feet, are sensitive to knocks and impacts.

1



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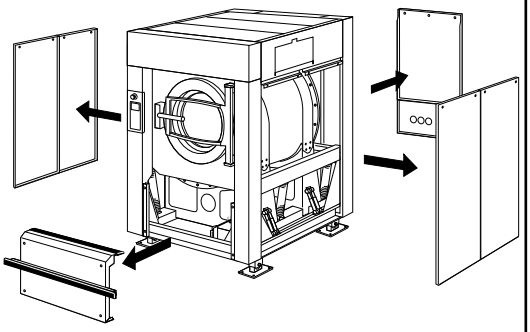
2



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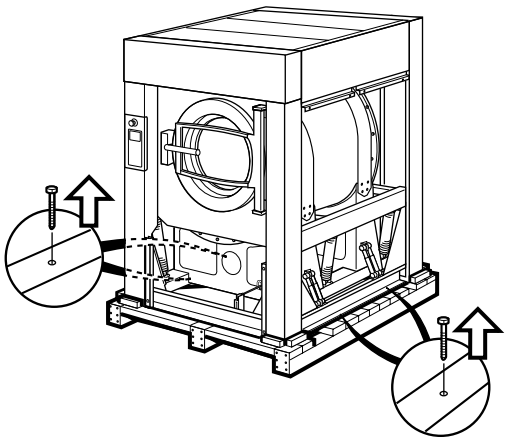
3



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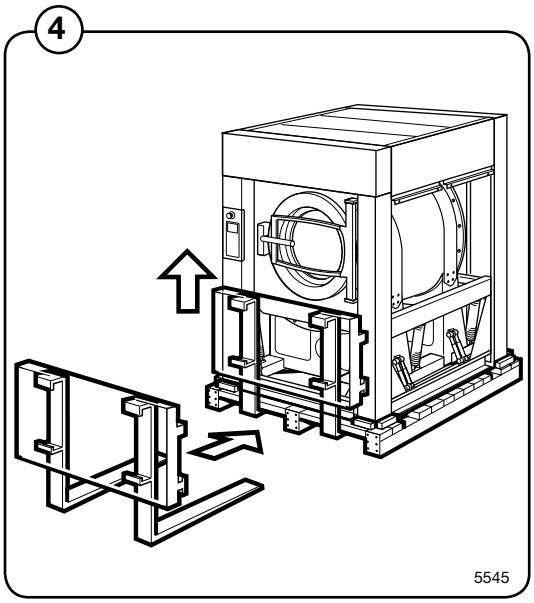
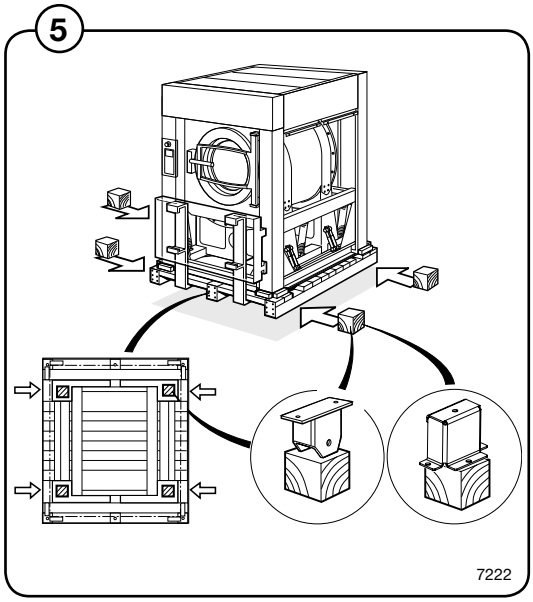
④ • Use a fork-lift truck to lift the machine.

⑤ • Position the four blocks of wood supplied, one beneath each machine foot (on the outer frame), within the recesses in the pallet.





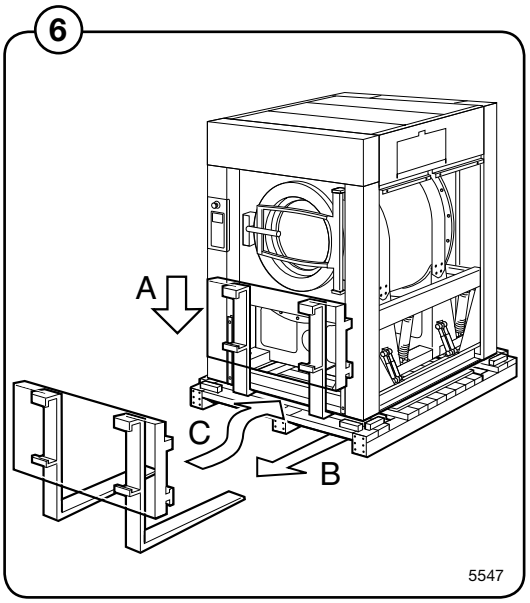
(6) • Lower the machine (A) and withdraw the truck forks (B). The machine should now be standing on the four blocks, and the pallet will be on the floor, clear of the machine. The next step is to insert the truck forks very carefully between machine and pallet (C).

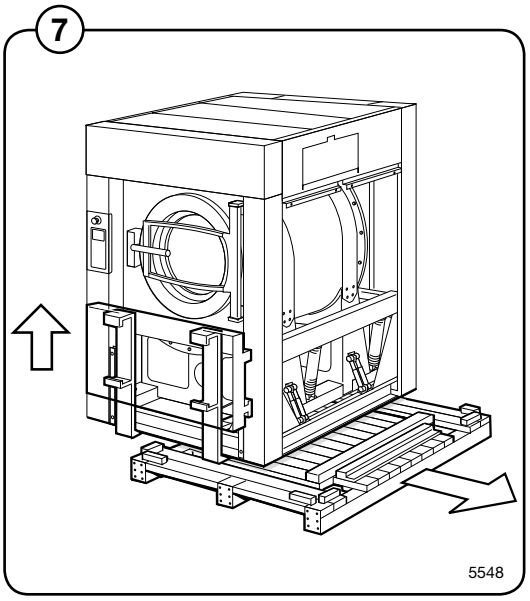
(7) • Lift the machine and remove pallet and blocks.

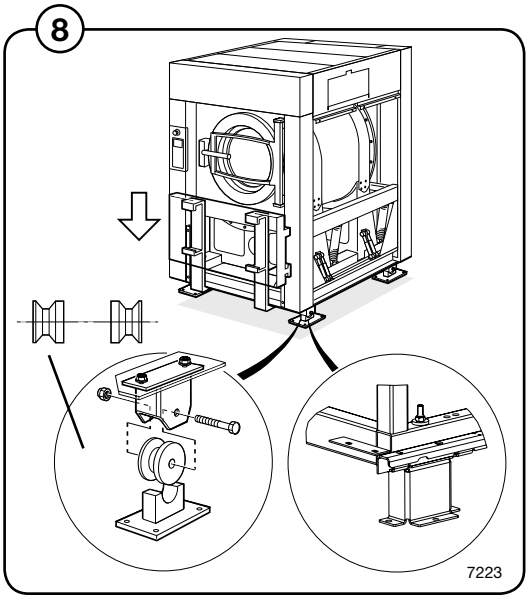
(8) • The feet can be of two types: fixed feet or rotating feet if the machine is to be fitted with tilt or weighing function. For machines with tilt or weighing function: screw on the machine's feet.

• If the machine is to have the tilt function, this is a suitable time to install the corner posts which hold the protective plates, and also, where applicable, the position sensors (see the section "Tilt function (optional equipment)").

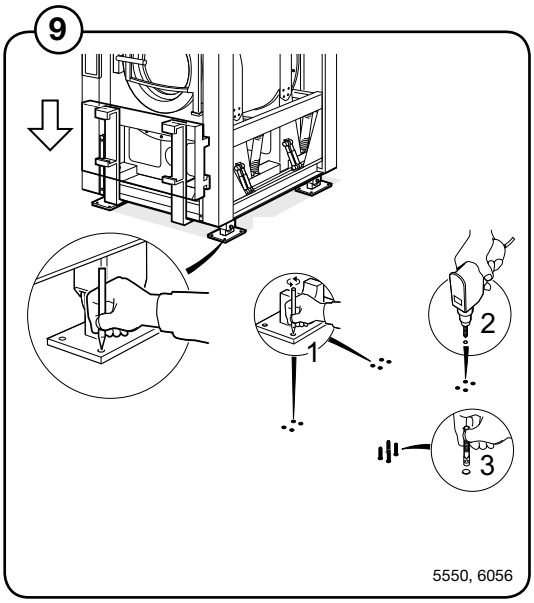
• It is important that the wheels are installed with the wider side facing in towards the machine in order for the tilt protection to fit.







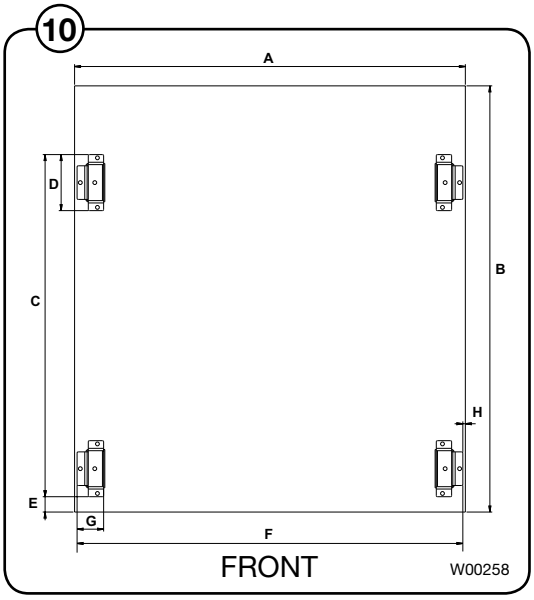
(9) • Put the machine in place. Mark out and drill the holes for fixing the feet. Hole diameter: 15 mm.



(10)

For standard machines

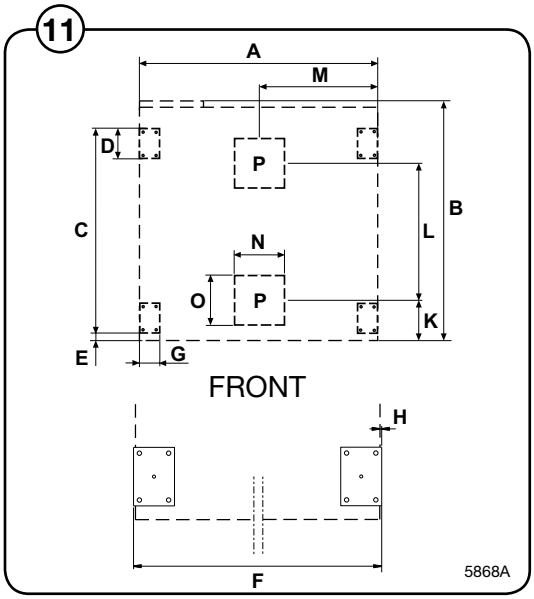
	W4400H	W4600H	W4850H	W41100H
A	1325	1390	1640	1640
B	1445	1605	1635	1850
C	1160	1315	1370	1585
D	190	190	190	190
E	50	50	50	50
F	1310	1370	1610	1610
G	90	90	90	90
H	10	10	15	15



(11)

For machines with tilt or weighing function

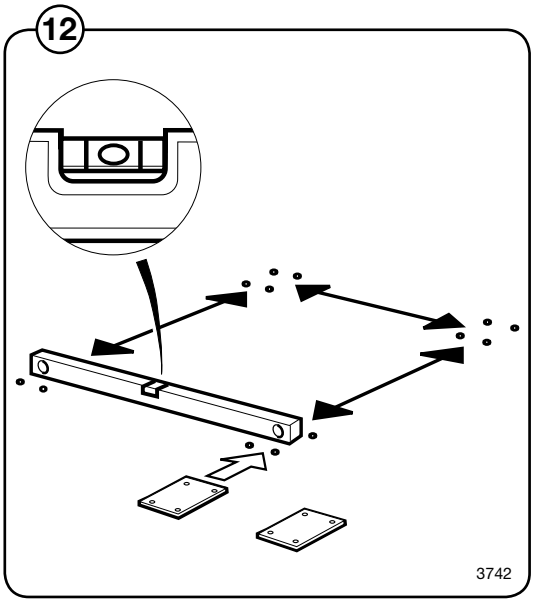
	W4400H	W4600H	W4850H	W41100H
A	1325	1390	1640	1640
B	1445	1605	1635	1850
C	1170	1325	1380	1600
D	200	200	200	200
E	50	45	45	45
F	1340	1400	1640	1640
G	140	140	140	140
H	-10	-10	0	0
K	275	275	270	270
L	715	870	925	1140
M	665	695	820	820
N	335	335	335	335
O	335	335	335	335
P	Tilting devices			

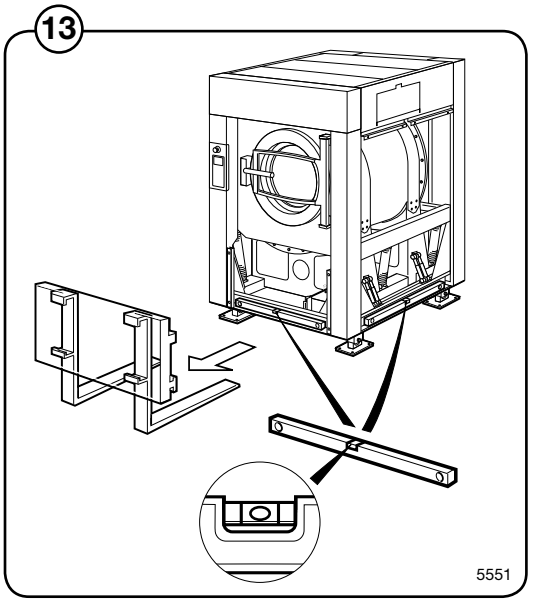


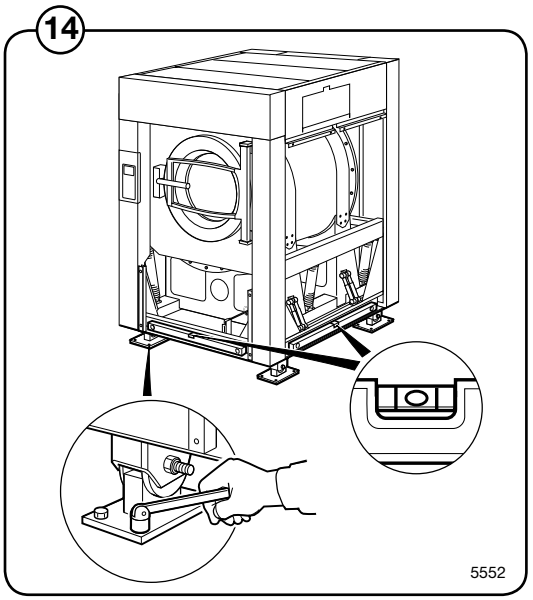
(12) **Use a spirit level and, where necessary, the ”washers” (or rectangular metal plates) supplied, to ensure that the floor mountings are level.**

(13) • Put the machine in place. Use a spirit level on suitable surfaces of the outer frame to check that the machine is level. Check too that the machine is resting firmly on all four feet.

(14) • Bolt the machine feet to the floor. Then check again that the machine is resting firmly (without movement) and is level.







Connecting the water supply

(15) The supply pipes to the machine should be fitted with manual shut-off valves to facilitate installation and service. Fit filters to the manual shut-off valves. Refer to local utilities regulations when fitting non-return valves.

The hoses should be rated for high pressure and for 2.5 MPa.

The following values apply to water pressure:

- recommended: 300-600 kPa
- limiting values, min: 50 kPa
  max: 1 MPa

The hoses should be flushed through before being connected to the machine.

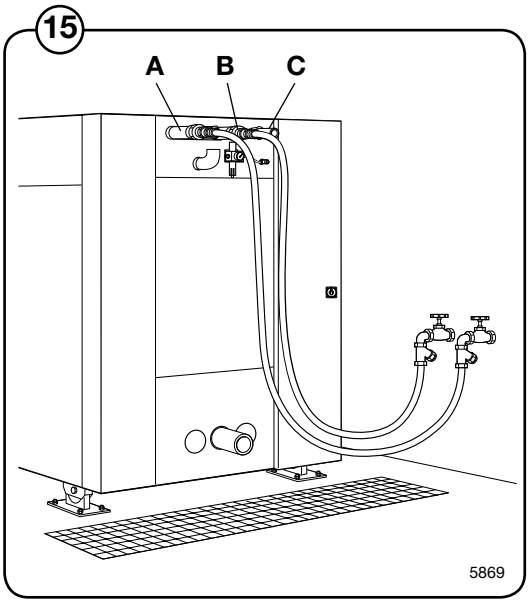
The hoses should hang in gradual arcs. This is particularly important if the machine is fitted with a tilting function. Connections with pipes directly to the machine are not allowed.

Connect the hoses as follows:

- cold water to (A)
- hot water to (B)
- (if using a third water supply:) the third water hose to (C).

  W4400H, W4600H
  Sizes of A, B and C: DN 25 (1" BSP).

  W4850H, W41100H
  Sizes of A, B and C: DN 32 (1 1/4" BSP).



Steam supply

(16) The supply hose (A) must have a manual shut-off valve to make installation and servicing easier. Fit filter to the manual shut-off valve. Connections with pipes directly to the machine are not allowed.

Connect an approved hose between filter and machine. The following values apply to steam pressure:

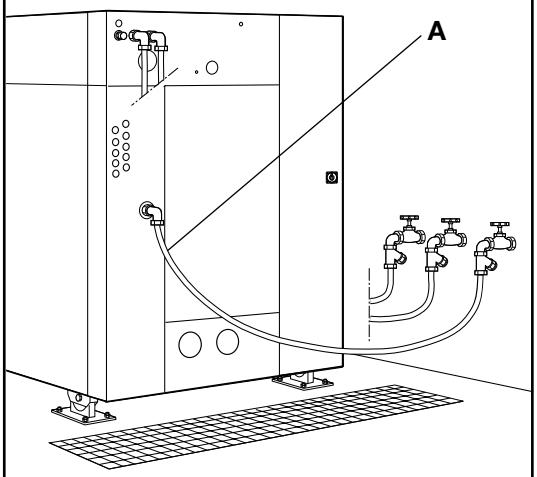
- recommended: 300-600 kPa
- limiting values, min: 50 kPa
  max: 800 kPa

The hose should hang in a gradual arc. This is particularly important if the machine is fitted with a tilting function.

W4400H, W4600H
Connection size: DN 20 (3/4" BSP).

W4850H, W41100H
Connection size: DN 32 (1 1/4" BSP).

16



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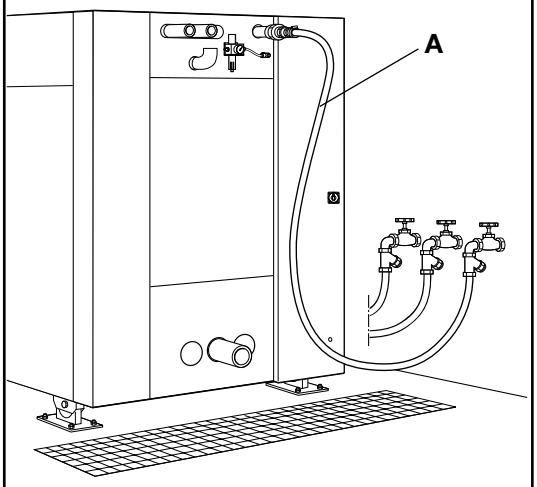


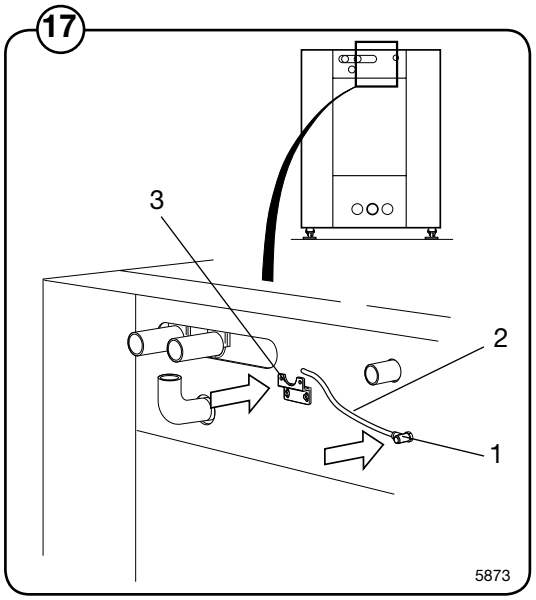
W4850H, W41100H 5870

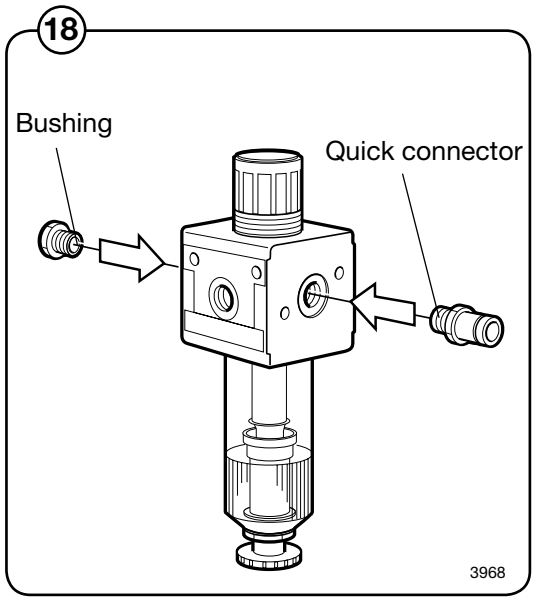
Compressed air connection

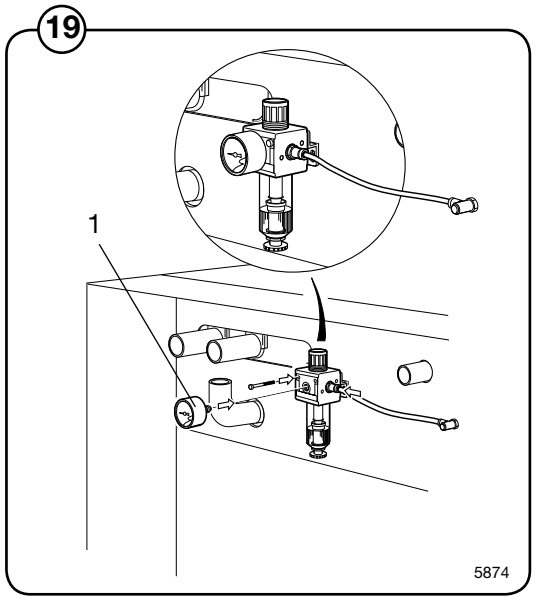
(17) A pressure regulator complete with water separation device is to be installed on the machine. When the machine is supplied, the angled coupling (1), hose (2) and bracket (3) for the pressure regulator will already be installed.

(18) Install the quick-connector for the hose and a bushing (for the hose from the compressed air supply) on the pressure regulator.

(19) Install the regulator on the bracket using two screws. Connect the compressed air hose using the quick-connector. Screw on the pressure gauge (1).





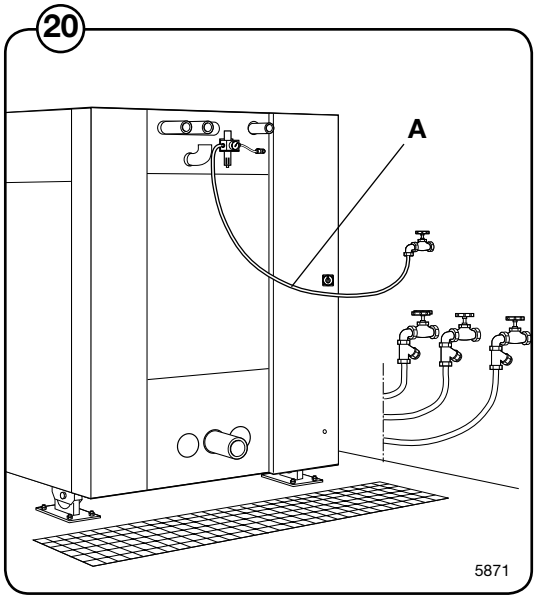


(20) Connect the hose from the compressed air supply to the bushing on the pressure regulator. Connect the hose so it hangs in a gentle arc. This is particularly important if the machine has the tilt function.

The connecting hose must be rated for a pressure of at least 1 MPa.

The following values apply to the compressed air supply:

- Recommended pressure: 500-700 kPa

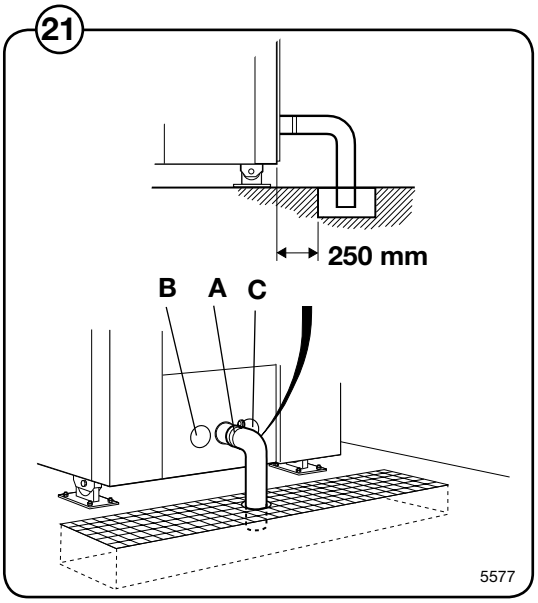


Drain

(21) The connector for the machine discharge (A) has an external diameter of 110 mm. The distance between the machine and the floor gully or drainage channel should be at least 250 mm.

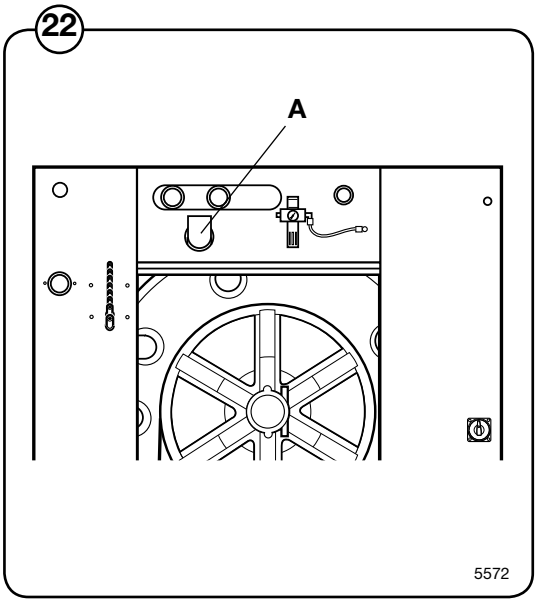
Connect a hose or a pipe to the drain connection. Avoid acute angles or kinks which could impede the flow. The hose or pipe should open into a floor gully, drainage channel or similar waste outlet. Make sure that the hose's function is unaffected by the tilting function if the machine has this feature.

If the machine has a second discharge, B and C must also be connected to the floor drain.



Ventilation

(22) The vent (A) from the washing machine drum is at the back of the machine. If bleach or other additives are used, the pipe should be extended and connected to a ventilation system.



Detergent dispenser, non-liquid detergents

If only non-liquid detergents are to be used in the detergent dispenser, the following adaptation is recommended:

(23) Drill two 5 mm holes in the bottom of each scoop to allow any water left to drain off.

Installation of equipment for external liquid supply

Electrical installation may only be carried out by competent, authorised personnel.

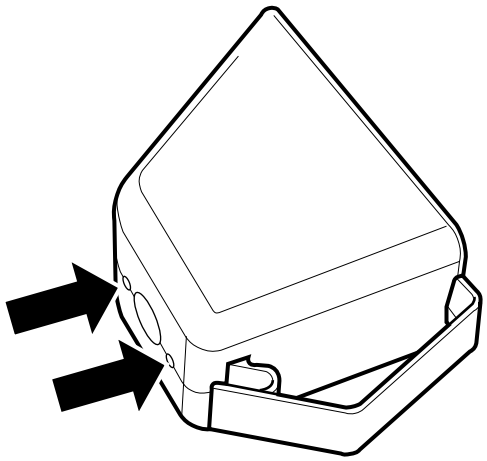
All external equipment which is connected to the machine must be CE/EMC-approved.

(24) The machine is fitted with 8 connections as standard , A (6 x ø10, 1 x ø16 and 1 x ø20), which are intended for connecting hoses from an external dispensing system.

(25) The external dosage unit connects to the X146 via the upper terminal in the coin operation unit. There are a total of 8 outlets for the dosing of washing detergent. The number on the terminal corresponds to the numbering of the liquid detergent function when setting the wash programme.

A common zero for all the outlets can be found on the X146 terminal ”Neutral”. 230 V max 0.5 A only intended for control voltage. If the machine is not fitted with a detergent reservoir, then additional signals can be received from X140.

(23)



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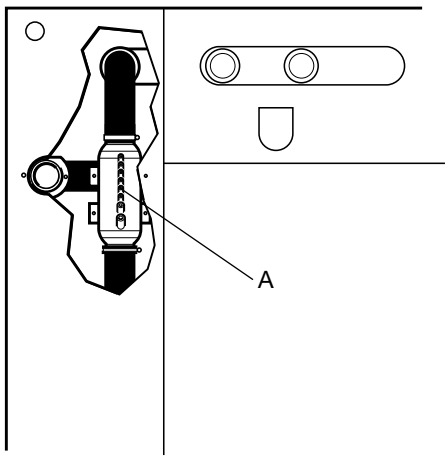
(24)



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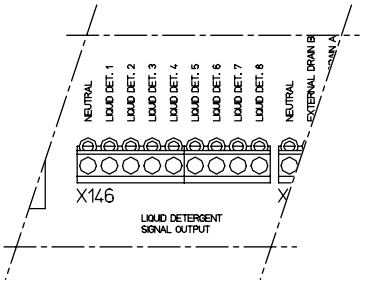
(25)



6527

Electrical installation

Electrical installation may only be carried out by competent, authorised personnel. Check that the earth conductor is correctly connected.

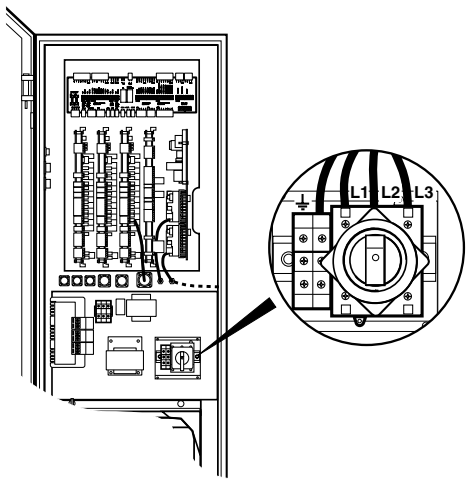
The electrical cable for the machine's power supply should hang in a gentle arc. This is particularly important if the machine is equipped with the tilt function or weighing equipment.

(26) Connect the machine to a separate mains circuit with its own circuit breaker(s). The various ratings required for circuit breakers are shown in the table.
Connect the cable to the main switch inside the compartment on the machine rear, see illustration.

The electrical cable used must be of a suitable size/rating. For the correct size/rating for this cable, check the relevant local or national regulations.

If an earth leakage circuit breaker (or RCD - residual current device) is used, it must be installed to protect the washer extractor only.

(26)



6585

Heating alternative	Voltage alternative	Total kW	Fuse A
No heating or Steam heating	200 V 3 AC	5,5	25
	208-240 V 3 AC	5,5	25
	230/400 V 3 AC	5,5	25/16
	240 V 3 AC	5,5	25
	346 V 3 AC	5,5	16
	380 V 3 AC	5,5	16
	400 V 3 AC	5,5	16
	415 V 3 AC	5,5	16
	440 V 3 AC	5,5	16
	480 V 3 AC	5,5	16
Electrical heated	230/400 V 3 AC	38	100/63
	240 V 3 AC	38	100
	346 V 3 AC	38	80
	380 V 3 AC	38	63
	400 V 3 AC	38	63
	415 V 3 AC	38	63
	440 V 3 AC	38	63
	480 V 3 AC	38	50

W4600H

Heating alternative	Voltage alternative	Total kW	Fuse A
No heating or Steam heating	200 V 3 AC	4,0	20
	230 V 3 AC	4,0	16
	230 V 3 AC	4,0	16
	240 V 3 AC	4,0	16
	240 V 3 AC	4,0	16
	380 V 3 AC	4,0	16
	400 V 3 AC	4,0	16
	415 V 3 AC	4,0	16
	440 V 3 AC	4,0	16
	480 V 3 AC	4,0	16
Electrical heated	230 V 3 AC	38	100
	230 V 3 AC	56	160
	240 V 3 AC	38	100
	240 V 3 AC	56	160
	380 V 3 AC	38	63
	380 V 3 AC	56	100
	400 V 3 AC	38	63
	400 V 3 AC	56	100
	415 V 3 AC	38	63
	415 V 3 AC	56	100
	440 V 3 AC	38	63
	440 V 3 AC	56	80
	480 V 3 AC	56	80

W4850H

Heating alternative	Voltage alternative	Total kW	Fuse A
No heating or Steam heating	200 V 3 AC	6,7	35
	230 V 3 AC	6,7	25
	240 V 3 AC	6,7	20
	380 V 3 AC	6,7	16
	400 V 3 AC	6,7	16
	415 V 3 AC	6,7	16
	440 V 3 AC	6,7	16
	480 V 3 AC	6,7	16

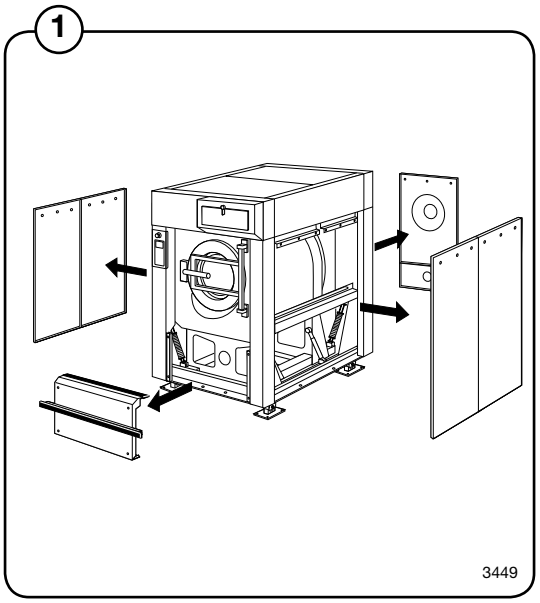
W41100H

Heating alternative	Voltage alternative	Total kW	Fuse A
No heating or Steam heating	200 V 3 AC	5,3	35
	230 V 3 AC	5,3	25
	240 V 3 AC	5,3	20
	380 V 3 AC	5,3	16
	400 V 3 AC	5,3	16
	415 V 3 AC	5,3	16
	440 V 3 AC	5,3	16
	480 V 3 AC	5,3	16

Tilt function

Installation

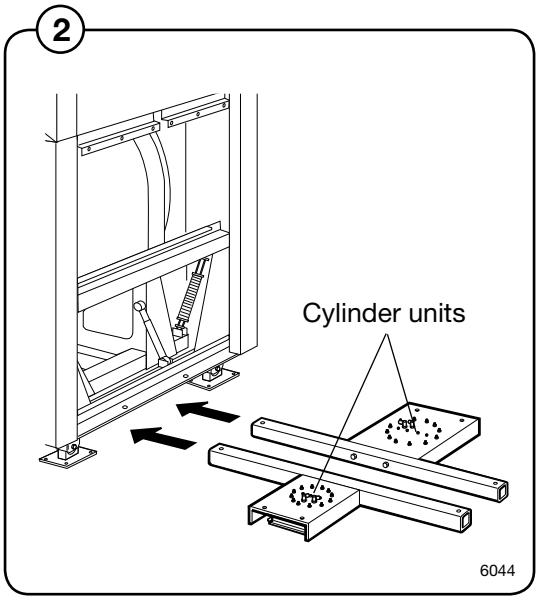
(1) Remove the machine's side panels, lower front panel and rear covers.



(2) <u>For machines with tilt both forwards and backwards</u>:

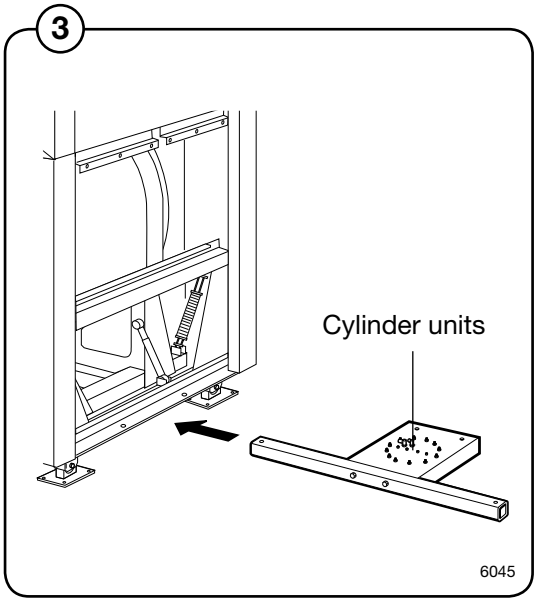
Insert the two cylinder units from the side of the machine underneath the machine frame.

If there is vinyl floor-covering on the floor:
To protect the floor from wear, a sheet of stainless steel should be laid beneath each cylinder unit.



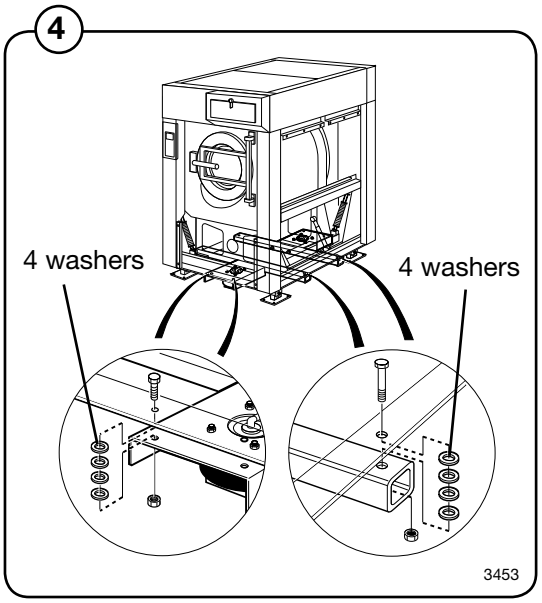
(3) <u>For machines with forward tilt only</u>:

Insert the cylinder unit from the side of the machine underneath the rear section of the machine frame.

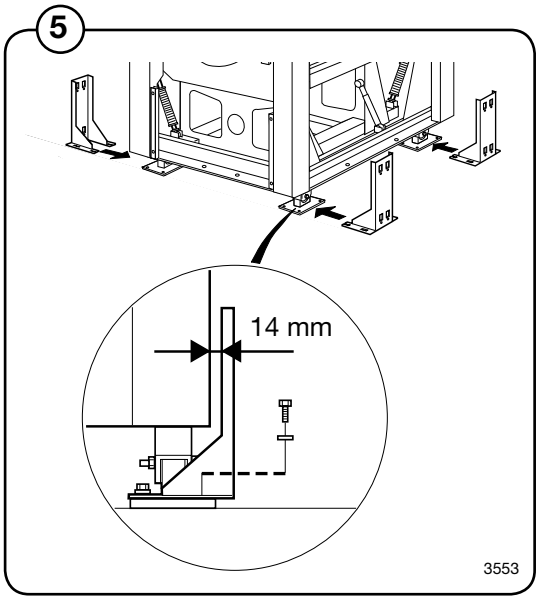


4 Secure the cylinder units using four bolts and nuts.

It is important to fit four washers (each 5 mm thick) between each cylinder unit and the machine frame (see illustration).

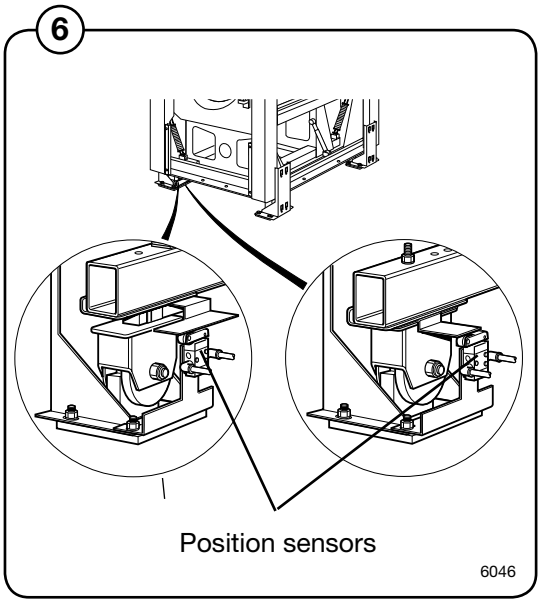


5 Fit the four corner posts, one for each corner of the machine, using the bolts which secure the machine feet to the floor. Adjust the clearance between the upper part of each corner post and the machine so it is 14 mm.



6 <u>For machines with tilt both forwards and backwards</u>:

Fit two pneumatic position sensors on two of the machine feet: at left-hand front and right-hand rear, diagonally opposed. The position sensors are to be fitted using the inner two fastening bolts of the feet, mounted on the corner posts just installed.



Tilt function (optional equipment)

For machines with tilt both forwards and backwards:

The compressed air lines which are to be connected to the air bellows and position sensors are supplied bundled on the machine rear.

Connect the lines to the air bellows and pressure sensors according to the table below. These lines do not need to be fastened to the frame, but can be laid on the floor underneath the machine.

The air lines are marked as follows:

(7)

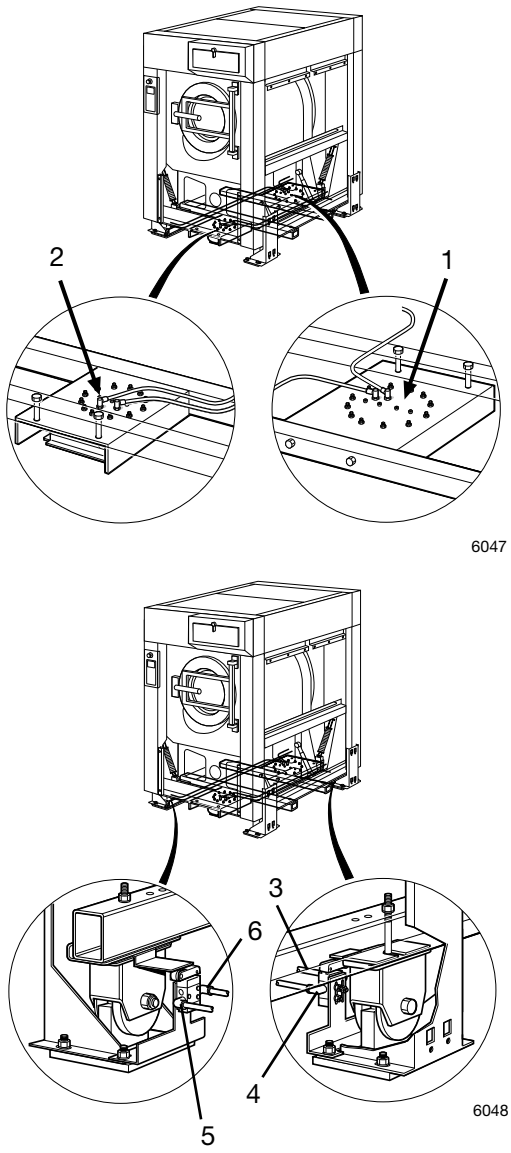
ID marking	Connect to
1	Rear air bellows
2	Front air bellows
3	Rear pressure sensor, connection 1
4	Rear pressure sensor, connection 2
5	Front pressure sensor, connection 1
6	Front pressure sensor, connection 2

(8) Note that the tubes for the pressure sensors must be connected correctly, see Fig. 7.

– Connection 1 – same side as data plate.

– Connection 2 – same side as the inset white plate.

7



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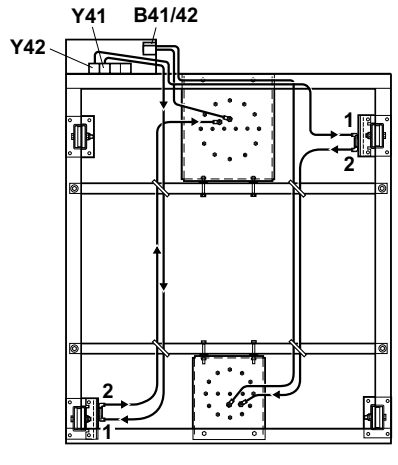
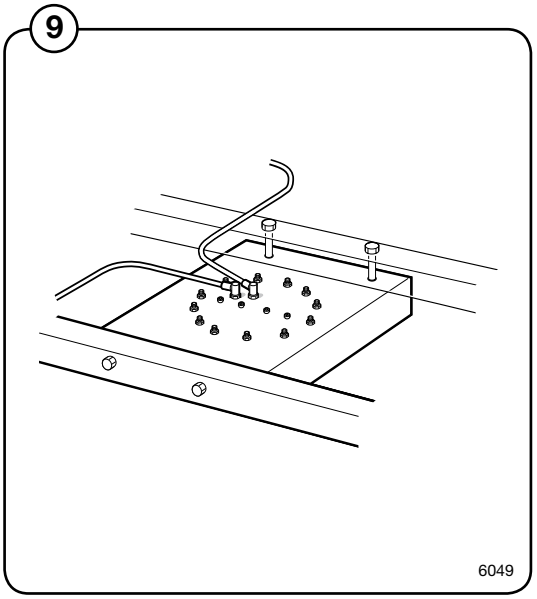


(9) For machines with forward tilt only:

The compressed air line to be connected to the air bellows is supplied bundled on the machine rear. Connect this line to the connection nipple on the top of the bellows.



Tilt function (optional equipment)

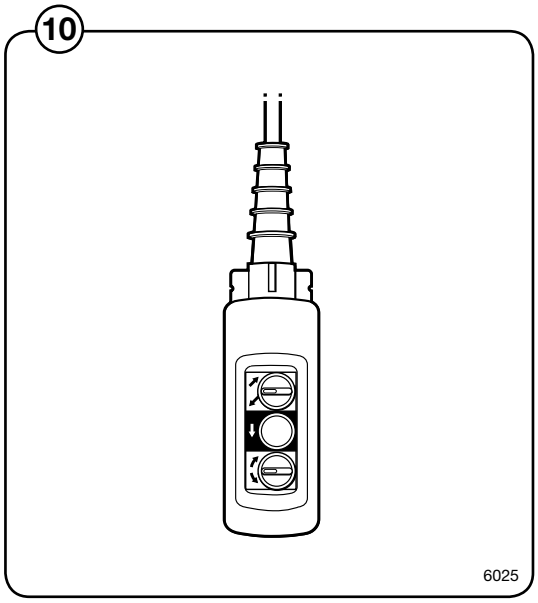
(10) Test the tilt function:

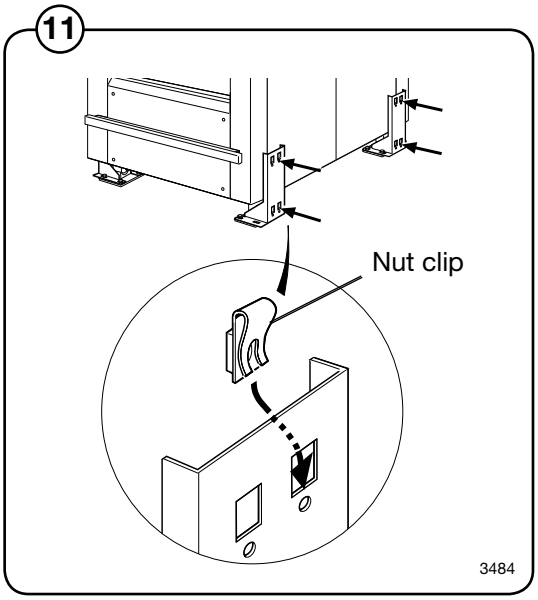
- Switch on the machine electrical switch(es) and turn on the compressed air supply.
- Open the door and lock it open.
- The uppermost switch on the tilt control unit tilts the machine either backwards (turn switch anticlockwise) or forwards (turn switch clockwise). The middle switch returns the machine to its normal (upright) position. These switches must be kept actuated throughout the entire tilt movement. If the switch is released, the tilt movement will halt and the machine will stop in its position.
- The bottom switch on the control unit rotates the drum either clockwise or anticlockwise.
- Check that the machine cannot tilt in the opposite direction until it has returned to its normal position after an earlier tilt.
- Check for any possible leaks from compressed air lines or from bellows and sensors.

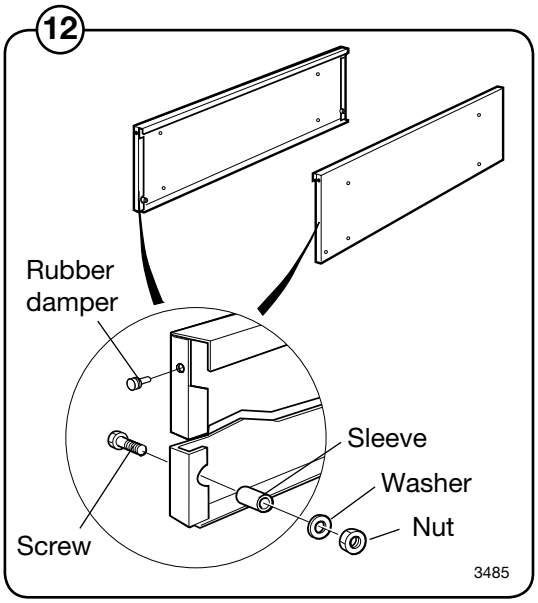
Refit the machine panels/covers.

(11) Fit two nut clips to each corner post. The nut clips slot into the rear grooves on the posts.

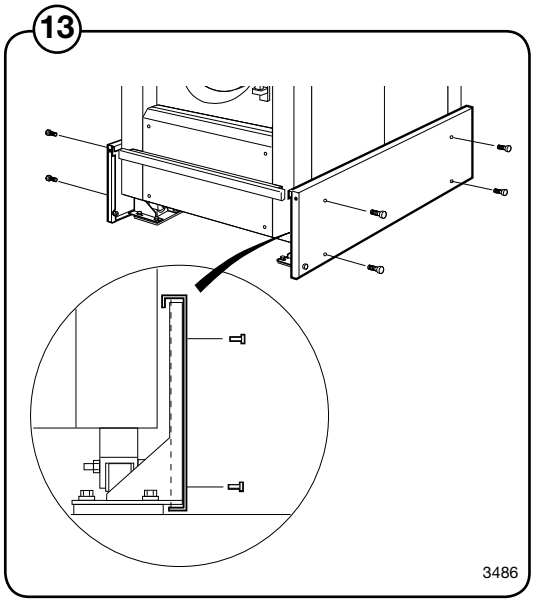
(12) Fit the rubber dampers and sleeves to the front end of each side panel strip.



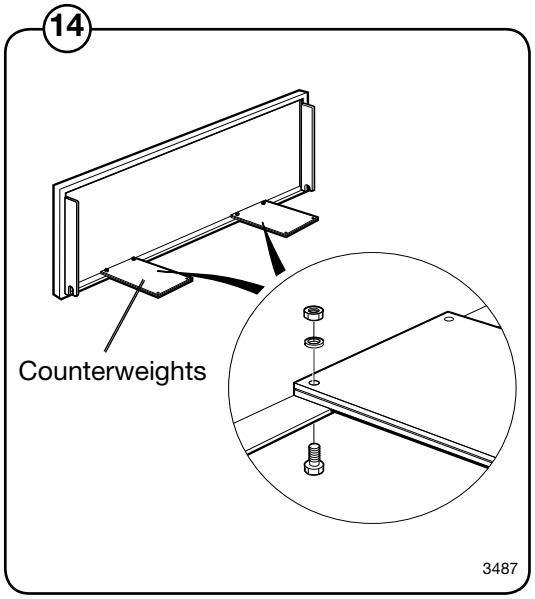




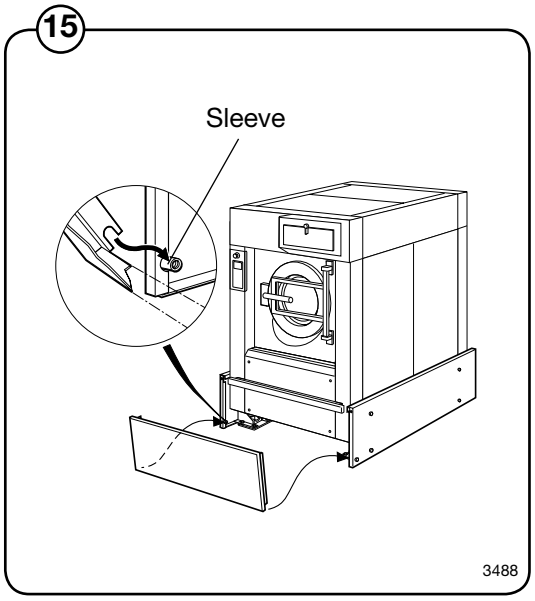
(13) Position and fasten the side panel strips.



(14) Fit the two counterweights to the front panel strip. The bolt heads should be at the bottom.



(15) Hang the front panel strip on the two sleeves you fitted to the side strips. Protective plates are mounted on the front and rear.



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